

EISCAT_3D in Sweden: national science targets, roadmap and funding plan

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EISCAT_3D will be a multistatic radar capable of imaging volumes in the Earth's atmosphere and geospace. Presently, five radar sites are foreseen to be located in northern Scandinavia, including one site with a 10 MW transmitter. EISCAT_3D is designed to use several different measurement techniques never before combined together in a single radar system: volumetric imaging, aperture synthesis imaging, multistatic imaging, scanning, tracking and adaptive experiments, and the possibility for continuous monitoring of the ionosphere and neutral atmosphere.

EISCAT_3D is on the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI) since 2008. It is identified as a major step in the development of EISCAT, which must be taken to stay on the scientific forefront. The planning of EISCAT_3D is currently financed by the EU Commission and the Swedish Research Council (VR). This presentation gives an overview of the Swedish science targets, roadmap and funding plan to support the EISCAT_3D construction, as proposed to VR by the Swedish scientific community on March 26, 2013.